NRCS WILDLIFE HABITAT INCENTIVES PROGRAM (WHIP)

2006 PRACTICE LIST

The following is a list of practice standards and associated cost share rates authorized for each natural community eligible for funding under WHIP.

Aquatic Ecosystems: Aquatic ecosystems (freshwater and saltwater) have been degraded by various human activities such as dam construction, in-stream barriers from culverted crossings, sediment and nutrient loading, and the introduction of exotic invasive species. These activities have stressed the aquatic environment to such a degree that several aquatic species have been extirpated and others are experiencing population declines. In our freshwater systems, anadromous fish cannot reach their historic spawning sites, resident fish habitat is segmented, and several freshwater mussels may be in jeopardy. In our saltwater systems, eelgrass beds are diminishing in quantity and quality, which is contributing to the decline of economically important species such as bay scallops.

Restoration and management will be aimed at removing barriers for anadromous, catadromous and resident fish populations; restoring eelgrass beds; and improving aquatic habitat through the use of stormwater treatment devices designed to reduce sediment and pollutant loading. Eligible sites for Std. 570 – Runoff Management System, must be designed to improve water quality to MA-DEP designated cold water fisheries, warm water fisheries or aquatic life.

Cost share is authorized for:

PRACTICE	COMPONENT	Unit Cost	Cost Type	Cost Share Rate
396 – Fish Passage	Establishment	$1	AM	75%
570 – Runoff Management System	Stormwater treatment devices (sediment only)	$2000 ea	AC	75%
	Stormwater treatment devices (sediment and oils)	$4667 ea	AC	75%
	Stormwater wetlands, infiltration practices, etc.	$1	AM	75%
595 – Pest Management	Exotic invasive species control **1/**			
	Light infestation	$100/acre	FR	100%
	Medium infestation	$200/acre	"	"
	Heavy infestation	$300/acre	"	"
643 – Restoration and Management of Rare or Declining Habitats	Planting eelgrass (includes labor and materials for transplanting 3" plugs on center)	$1	AM	75%

1/ Control must include herbicide use, physical removal (ex. handpulling, weed wrench, etc.) or biological control. Mutliple treatments allowed.

Grasslands: Grasslands are an important habitat element for a variety of wildlife, including migratory songbirds, raptors, insects and large and small mammals. Due to the reduction of grassland habitat in the Northeast, many grassland nesting bird species are experiencing population declines.

Restoration and management is aimed at developing and/or maintaining large stands of grasslands as habitat for migratory song birds, raptors, insects and various mammals. Eligible grassland sites must be at least 5 acres in size, and should comprise at least 10 acres in conjunction with adjacent grassland. The "cut and chip trees" components should only be used in locations where it is technically feasible to create and maintain grassland, and where it is ecologically warranted (i.e., it will not result in forest fragmentation). The "stump chipping" component is only to be used in rare circumstances where stumps are making it extremely difficult to maintain the site by mowing.

Cost share is authorized for:

PRACTICE	COMPONENT	Unit Cost	Cost Type	Cost Share Rate
327 – Conservation Cover	Establishing grasses (price includes seed bed preparation, soil amendments, seeding and weed control during establishment)			
	Warm season grasses	$934/ac	AC	75%
	Cool season grasses	$534/ac	"	"
338 – Prescribed Burning	Prescribed burn	$350/ac	FR	100%
382 - Fence	High tensile 2, 3 or 4 strand	$2.50/lf	AC	75%
	High tensile 5 or 6 strand	$3.00/lf	AC	"
	Conventional electric 2 strand or 4 or 5 strand barbed wire	$3.00/lf	AC	"
595 – Pest Management	Exotic invasive species control **1/**			
	Light infestation	$100/ac	FR	100%
	Medium infestation	$200/ac	"	"
	Heavy infestation	$300/ac	"	"
647 – Early Successional Habitat Development / Management	Lime application	$140/ac	AC	75%
	Strip disking	$167/ac	AC	75%
	Mowing, smooth terrain **2/**	$79/ac	FR	100%
	Mowing, rough terrain **2/**	$129/ac	FR	100%
	Cut/clear brush (to 4" DBH)			
	Light density	$350/ac	AM	75%
	Medium density	$465/ac	"	"
	Heavy density	$800/ac	"	"
	Chipping stumps to 18" deep	$26 ea	AM	75%
	Cut and chip trees up to 8" DBH	$2,000/ac	AM	75%
	Cut and chip trees >8" DBH (tree shear and whole tree chipper)	$4,725/ac	AM	75%

1/ Control must include herbicide use, physical removal (ex. handpulling, weed wrench, etc.) or biological control. Multiple treatments allowed.
2/ Cost share allowed every other year only.

Shrub Habitat and Early Woodlands: Shrub habitat is generally dominated by low growing shrubs and young trees, and may naturally be either successional or permanent. Early woodland generally occurs within the forest environment and is dominated by tree seedlings. These early successional habitats are becoming less frequent in the landscape and are considered a declining habitat type in the Northeast, resulting in population declines of many species that are dependent on them.

Restoration/management of shrub habitat is aimed at creation of a shrub dominated area. Restoration/management of early woodland is focused on clear cuts in the forest to regenerate the growth of shrubs, tree seedlings and herbaceous cover.

Clear cuts done to initiate forest stand regeneration of desirable tree species should be planned under Practice Standard 666 – Forest Stand Improvement. These sites must have a current forest management plan, prepared by a licensed forester, which recommends the regeneration cut. The high grade prevention component under Std. 666 can only be used in conjunction with a logging operation.

Cost share is authorized for:

PRACTICE	COMPONENT	Unit Cost	Cost Type	Cost Share Rate
338 – Prescribed Burning	Prescribed burn	$350/ac	FR	100%
382 – Fence	High tensile 2, 3 or 4 strand	$2.50/lf	AC	75%
	High tensile 5 or 6 strand	$3.00/lf	AC	"
	Conventional electric 2 strand or 4 or 5 strand barbed wire	$3.00/lf	AC	"
595 – Pest Management	Exotic invasive species control **1/**			
	Light infestation	$100/ac	FR	100%
	Medium infestation	$200/ac	"	"
	Heavy infestation	$300/ac	"	"
647 – Early Successional Habitat Development / Management	Cut/clear brush (up to 4" DBH)			
	Light density	$350/ac	AM	75%
	Medium density	$465/ac	"	"
	Heavy density	$800/ac	"	"
	Cut and chip trees up to 8" DBH	$2,000/ac	AM	75%
	Cut and chip trees >8" DBH (tree shear and whole tree chipper)	$4,725/ac	AM	75%
	Shrub planting **2/**	$8.00 ea	AC	75%
666 – Forest Stand Improvement	High grade prevention (cutting low economic trees in conjunction with a logging operation)	$300/ac	FR	100%
	Cut and chip trees up to 8" DBH	$2,000/ac	AM	75%
	Cut and chip trees >8" DBH (tree shear and whole tree chipper)	$4,725/ac	AM	75%

1/ Control must include herbicide use, physical removal (ex. handpulling, weed wrench, etc) or biological control. Multiple treatments allowed.
2/ Only to be used when creating shrubland.

Wetlands: Wetlands have some of the richest biological diversity of all natural communities. They provide a variety of functions such as flood water retention, water quality protection, and habitat for a variety of flora and fauna. In Massachusetts, we have lost from 28 – 42% of our historical wetlands. Many of the remaining wetlands have been degraded through the introduction of excessive amounts of sediment and nutrients, hydrologic modification and introduction of exotic invasive species.

Wetland restoration under WHIP will be focused on restoring the wetland hydrology and the natural hydrophytic plant community on degraded freshwater, brackish and saline wetlands. Restoration could include such measures as ditch plugging, fill removal, installation of larger culverts to restore tidal flow, etc.

Wetland enhancement under WHIP is focused on providing cost share assistance for the installation of water level control devices so that landowners can co-exist with beavers on their property. Where water levels on existing high quality beaver ponds are threatening property or crops, NRCS will provide cost share assistance for the installation of water flow devices to address flooding problems in order to prevent beaver dams from being removed and thus eliminating the beaver pond wetland. Very few beaver wetlands are suitable for water level control devices; therefore, all the following conditions must exist for a site to be eligible under Std. 659 Wetland Enhancement:

- beaver dam must not directly involve a man-made structure;
- temporary flooding can be tolerated by the landowner(s);
- site does not provide numerous potential beaver dam sites downstream;
- wetland has a water depth of 4 feet; and
- site is accessible for maintenance.

Cost share is authorized for:

PRACTICE	COMPONENT	Unit Cost	Cost Type	Cost Share Rate
595 – Pest Management	Exotic invasive species control **1/**			
	Light infestation	$100/ac	FR	100%
	Medium infestation	$200/ac	"	"
	Heavy infestation	$300/ac	"	"
657 – Wetland Restoration	Hydrologic restoration	$1	AM	75%
	Vegetative restoration			
	Seeding	$2187/ac	AC	75%
	Planting culms and plugs	$2 ea	"	"
	Tree and shrub planting	$8 ea	"	"
659 – Wetland Enhancement	Water level control device	$1	AM	75%
	Fencing beaver trees	$3/lf	AC	75%
	Hydrologic restoration	$1	AM	75%
	Vegetative restoration			
	Seeding	$2187/ac	AC	75%
	Planting culms and plugs	$2 ea	"	"
	Tree and shrub planting	$8 ea	"	"

1/ Control must include herbicide use, physical removal (ex. handpulling, weed wrench, etc) or biological control. Multiple treatments allowed.

Riparian Buffers: Riparian areas provide a variety of functions including serving as wildlife corridors, filtering sediment, reducing erosion, regulating water temperatures and providing a source of detritus for aquatic organisms. Human activities have altered riparian areas through the narrowing and/or elimination of riparian buffers and the degradation of water quality through the introduction of sediment, nutrients and pollutants.

Restoration and management will be aimed at re-establishing natural vegetation along streams, lakes and wetlands. Restoration can be accomplished by minimizing disturbance and allowing natural plant succession to occur or through planting. Vegetation may consist of a mix of trees, shrubs, grasses and other herbaceous vegetation.

Cost share is authorized for:

PRACTICE	COMPONENT	Unit Cost	Cost Type	Cost Share Rate
382 – Fence	High tensile 2, 3 or 4 strand	$2.50/lf	AC	75%
	High tensile 5 or 6 strand	$3.00/lf	AC	"
	Conventional electric 2 strand or 4 or 5 strand barbed wire	$3.00/lf	AC	"
390 – Riparian Herbaceous Cover	Establishment (includes site prep, soil amendments, seed, erosion control and planting)	$934/ac	AC	75%
391 – Riparian Forest Buffer	Establishment (includes site prep, soil amendments, brush mat, stake, protector and planting–370 stems/acre)	$2500/ac	AC	75%
	Live stakes, installed	$2 ea	AC	75%
	Tree/shrub planting (includes brush mat, stake, protector, plant and planting)	$8 ea	AC	75%
595 – Pest Management	Exotic invasive species control **1/**			
	Light infestation	$100/ac	FR	100%
	Medium infestation	$200/ac	"	"
	Heavy infestation	$300/ac	"	"

1/ Control must include herbicide use, physical removal (ex. handpulling, weed wrench, etc) or biological control. Multiple treatments allowed.

Xeric Forests (pine barrens): Restoration sites will be on substrates of excessively drained or outwash soils. Restoration will be aimed at restoring pitch pine-scrub oak plant community. Area will be managed as a disturbance community by application of management techniques, which mimic natural processes.

Cost share is authorized for:

PRACTICE	COMPONENT	Unit Cost	Cost Type	Cost Share Rate
338- Prescribed Burning	Prescribed burn	$350/ac	FR	100%
595 – Pest Management	Exotic invasive species control **1/**			
	Light infestation	$100/ac	FR	100%
	Medium infestation	$200/ac	"	"
	Heavy infestation	$300/ac	"	"
643 – Restoration and Management of Rare or Declining Habitats	Xeric forest restoration	$1	AM	75%

1/ Control must include herbicide use, physical removal (ex. handpulling, weed wrench, etc) or biological control.